

Storm Data and Unusual Weather Phenomena

September 2003									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Killed	Number of Persons Injured	Property	Estimated Damage Crops	Character of Storm
<u>NEW MEXICO Southeast</u>									
Lea County									
Hobbs	09	2028MST			0	0	0	0	Hail(0.75)
									Scattered thunderstorms moved across the plains of southeast New Mexico during the evening of the 9th. An isolated storm became severe and resulted in large hail in the Hobbs vicinity.
<u>TEXAS West</u>									
Andrews County									
6 E Andrews	07	1610CST			0	0	0	0	Hail(0.75)
									Reported on State Route 176.
Andrews County									
7 E Andrews to 9 E Andrews	07	1610CST 1615CST			0	0	20K	0	Thunderstorm Wind (EG65)
									At least five power poles were blown down by severe thunderstorm winds along State Route 176 near the intersection of Farm to Market Road 1788.
									The first of four supercell thunderstorms to affect the northern Permian Basin during the evening of the 7th and the early morning hours of the 8th developed over Andrews County. This storm resulted in large hail and damaging thunderstorm winds. The storm then propagated southeast across unpopulated areas of southwest Martin County, and eventually across Midland (including the city of Midland proper) and northern Upton Counties.
Midland County									
Midland to 5 SE Midland	07	1705CST 1754CST			0	0	5K	0	Thunderstorm Wind (EG57)
									Severe thunderstorm wind gusts estimated at 65 MPH affected the Midland vicinity. Multiple reports of similar winds were received. These winds destroyed a storage shed along Highway 158 southeast of the city.
Midland County									
Midland to 5 SE Midland	07	1715CST 1748CST			0	0	0	0	Hail(1.00)
									Multiple reports of penny to quarter size hail were received from the Midland vicinity.
Midland County									
Midland	07	1735CST 1900CST			0	0	15K	0	Flash Flood
									Reports indicated several cars stalled in flash flood waters on Loop 250 at Fairgrounds Road. No injuries were reported.
Midland County									
Greenwood	07	1750CST 1930CST			0	0	0	0	Flash Flood
									Local officials reported flash flooding that resulted in high water covering city streets in Greenwood.
Midland County									
Greenwood	07	1750CST			0	0	0	0	Hail(1.00)
Upton County									
Midkiff	07	1930CST			0	0	8K	0	Thunderstorm Wind (EG61)
									Thunderstorm winds blew large trees and power lines down in the city of Midkiff.
Dawson County									
14 NNE Lamesa to 5 ENE Arvana	07	2020CST 2050CST			0	0	250K	3.7M	Hail(1.75)
									The second supercell thunderstorm to affect the Permian Basin this day resulted in a swath of large hail that damaged property and destroyed cotton and sorghum crops across northeast Dawson County. Hailstones ranging in size from pennies to golfballs fell along U.S. Highway 87 north-northeast of Lamesa. Large hail covered the ground northeast and east of Arvana, also ranging in size from pennies to golfballs. NWS meteorologists interviewed local residents the following day. Several residents indicated the hail fell at their locations for up to twenty minutes. The combination of damage surveys and interviews with local agricultural officials indicated over 3.6 million dollars worth of damage to cotton and sorghum crops. In addition, house roofs, vehicles, and windows were damaged by the hail.
Dawson County									
2 E Arvana	07	2023CST			0	0	0	0	Hail(2.75)
									Baseball size hail was reported along Farm to Market Road 2411 east of Arvana. This very large hail was observed in association with the destructive hail swath listed above. Damage estimates indicated in the previous listing reflect those associated with this report in addition to the numerous reports of relatively smaller hail along entire the damage path.

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TEXAS West									
Dawson County East Portion	07	2114CST			0	0	15K	0	Flash Flood
	High water resulting from flash flooding was widespread across eastern Dawson County late on the 7th and into the early morning hours of the 8th. As the supercell storm tracked southeast across the area, vehicles were stalled in high water on U.S. Highway 87 twelve miles north of Lamesa. Farm to Market Road 178 was also impassable three miles north of Key.								
Dawson County 2 NE Sand to 6 S Sand	07	2200CST 2235CST			0	0	150K	1.9M	Hail(1.75)
	The evening's third supercell to affect the northern Permian Basin (the second supercell in Dawson County) resulted in up to golfball size hail that broke windows, caused roof damage, and damaged vehicles at rural residences in the vicinity of Sand. This storm also resulted in the destruction of local cotton and surgham crops. Post stone surveys and interviews suggest an additional 1.9 million dollars worth of agricultural damage occurred. Several area residents reported the duration of large hail at their locations to range from twenty-five to thirty minutes.								
Dawson County Sand	07 08	2230CST 0300CST			0	0	0	0	Flash Flood
	The supercell thunderstorm over western Dawson County resulted in flash flooding. U.S. Highway 180 was closed west of Lamesa due to flowing high water. In addition, many rural roads near Sand were impassable. No injuries were reported.								
Martin County 13 NW Tarzan	07	2235CST			0	0	0	0	Hail(1.75)
	As the evening's third supercell stone propagated south-southeast out of Dawson County and into northern Martin County, large hail up to the size of golfballs covered Highway 349. The Texas Department of Transportation temporarily closed a section of the highway due to drifted hail.								
Gaines County 20 SE Seminole	07	2350CST 2355CST			0	0	0	0	Hail(0.75)
	The fourth supercell thunderstorm to develop over the northern Permian Basin this evening initiated over eastern Gaines County. This stone resulted in penny size hail over rural parts of the county southeast of Seminole before moving into Andrews County.								
Andrews County 16 E Andrews to 20 E Andrews	08	0020CST 0035CST			0	0	75K	0	Thunderstorm Wind (EG70)
	Severe thunderstorm winds blew down at least 15 power poles along Highway 176 east of Andrews to near the Martin County line as the supercell stone moved across eastern Andrews County.								
Andrews County 20 E Andrews	08	0025CST 0035CST			0	0	0	0	Hail(1.00)
	Large hailstones ranging in size from dimes to quarters covered the ground and stripped the leaves from trees at a rural residence on the Andrews/Martin County line just off of Highway 176.								
Martin County 13 W Tarzan	08	0025CST 0035CST			0	0	0	0	Hail(1.00)
	Large hailstones ranging in size from dimes to quarters covered the ground and stripped the leaves from trees at a rural residence on the Andrews/Martin County line just off of Highway 176.								
Martin County 15 SW Tarzan	08	0050CST 0051CST	0.2	100	0	0	0	0	Tornado (F0)
	As the supercell storm moved from eastern Andrews County into western Martin County a local television meteorologist who was in the field storm spotting, and a WFO Midland staff meteorologist who was looking north from the office, observed a tornado. The tornado was located in rural areas of southwest Martin County, approximately three miles west of Highway 349 and eight miles south-southwest of the intersection of Highways 349 and 176. Due to a lack of roads leading into the uninhabited rangeland where the tornado occurred, a NWS post-event ground survey team could not locate tornadic damage.								
Martin County 12 SW Tarzan	08	0104CST			0	0	0	0	Hail(1.75)
	Hail to the size of golfballs accumulated three feet deep on Highway 349. The Texas Department of Transportation in Martin County was called out for the second time this night to close parts of that highway due to hail. Parts of Highway 349 remained closed due to high hail drifts for at least nine hours.								

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TEXAS West									
Martin County 13 W Tarzan to 13 SW Tarzan	08	0105CST 0110CST			0	0	120K	0	Thunderstorm Wind (EG78)
The storm which produced the tornado quickly evolved from a classic supercell structure to a high precipitation supercell as the occlusion process occurred. This transition resulted in a broad swath of very strong and damaging southwest to west winds which crossed Highway 349. The most intense damage occurred along the stretch of Highway 349 from the intersection with 176 to about 6 miles south of that intersection. This damage correlated with a strong low level divergent pattern in radar velocity products, indicative of an intense downburst in the forward flank downdraft of the storm. These winds blew down numerous power poles (up to twenty-five) from the intersection of Highways 349 and 176, south to ten miles south of that intersection. On metal light pole, which was snapped at the base, was rated to withstand 80 MPH winds.									
A series of four supercell thunderstorms moved southeast across the northern Permian Basin during the late afternoon and evening of the 7th, and the early morning hours of the 8th. These storm produced devastating large hail, damaging winds, flash flooding, and a tornado. In addition to property damage, large hail resulted in the widespread destruction of area agricultural crops.									
Midland County 20 S Midland	08	1910CST			0	0	0	0	Hail(0.75)
Reported on Highway 349.									
Midland County 15 S Midland	08	1930CST 2045CST			0	0	0	0	Flash Flood
Law enforcement officials reported high water flowing across Highway 349 and other rural roadways in southern Midland County. An isolated supercell storm developed over southern Midland County and moved south into northern Upton County during the evening hours of the 8th. This storm developed near the intersection of an outflow boundary and a dryline. The storm initially split, with the northern (left moving) member weakening and the southern (right moving) cell becoming severe with large hail and flash flooding. The storm remained over sparsely populated areas, and documented reports are not likely representative of the storm's severity.									
Pecos County 24 SSW Bakersfield	10	1625CST			0	0	0	0	Thunderstorm Wind (EG57)
Large limbs measuring "several inches" in diameter were broken off of trees at a rural residence in far southeast Pecos County by severe thunderstorm winds. Indicated time is estimated.									
Scurry County 2 W Knapp	10	1937CST 1950CST			0	0	10K	250K	Hail(2.75)
Two reports were received of baseball size hail along Farm to Market Road 1610 west of Knapp. The local newspaper editor reported windows knocked out of rural homes by the large hail stones. Several second hand reports of crop damage were received, but local authorities said the damage was very isolated in nature. Roof and vehicle damage also resulted.									
Mitchell County Colorado City to 4 WSW Colorado City	10	1955CST 2007CST			0	0	0	0	Hail(1.75)
Golfball hail was reported in the Colorado City vicinity.									
Severe thunderstorms resulted in very large hail and damaging winds across parts of West Texas during the afternoon and evening of the 10th. The hardest hit areas included the northeast Permian Basin, where hail as large as baseballs was reported. Despite multiple reports of very large hail, no reports of significant damage to property or agricultural crops were reported.									
Jeff Davis County 9 NW Ft Davis	11	1745CST 1750CST			0	0	0	0	Thunderstorm Wind (MG74)
Severe thunderstorm wind gusts were recorded by an automated observing system at the McDonald Observatory on Mount Locke. A gust of 85 MPH was recorded at 1745 CST and a gust of 82 MPH was recorded at 1750 CST. The observatory staff reported no damage from the storm which was also accompanied by large hail.									
Jeff Davis County 9 NW Ft Davis	11	1750CST			0	0	0	0	Hail(1.00)
Penny to quarter size hail covered the ground at the McDonald Observatory on Mount Locke.									
Jeff Davis County Ft Davis	11	1801CST			0	0	0	0	Hail(1.75)
Large hail ranging from quarter to golfball size covered the ground in Fort Davis.									

Storm Data and Unusual Weather Phenomena

TEXAS West	Date	Time	Path	Path	Number of		Estimated		September 2003
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
Brewster County 5 ENE Alpine to 7 ENE Alpine	11	1834CST 1842CST			0	0	0	0	Hail(1.75)
									Nickel to golfball size hail was reported near the intersection of Highways 67 and 90.
									Severe thunderstorms developed in the vicinity of the Davis Mountains on the 11th. A few storms became severe resulting in very strong thunderstorm winds over 80 MPH and large hail up to the size of golfballs. No significant damage was reported.
Upton County 1 E Midkiff	13 14	2325CST 0130CST			0	0	0	0	Flash Flood
									Law officials reported flash flooding resulting in high water flowing over Farm to Market Road 2401 just east of Midkiff.
Reagan County 10 NW Texon	14	0023CST			0	0	0	0	Hail(1.75)
									Reported at a rural gas plant on the Upton/Reagan County line just off of Farm to Market Road 1555.
Upton County 14 NE Rankin	14	0023CST			0	0	0	0	Hail(1.75)
									Reported at a rural gas plant on the Upton/Reagan County line just off of Farm to Market Road 1555.
Reagan County 20 N Big Lake	14	0030CST 0145CST			0	0	0	0	Flash Flood
									Flash flooding resulted in Highway 137 being inundated by high water, resulting in the highway becoming impassable.
Pecos County 6 S Iraan	14	0626CST 0945CST			0	0	0	0	Flash Flood
									Law enforcement officials reported up to eight inches of high water flowing over Highway 349 as a result of flash flooding.
									Severe thunderstorms, including an isolated supercell over Upton and Reagan Counties, developed along and just north of an advancing cold front during the overnight hours and early morning hours of the 13th and 14th. These storms resulted in large hail up to the size of golfballs and flash flooding.
Pecos County 3 N Cayanosa	25	0515CST 0730CST			0	0	0	0	Flash Flood
									The intersection of Farm to Market Roads 1776 and 1450 was closed due to high water.
Midland County Midland	25	0845CST 1100CST			0	0	0	0	Flash Flood
									Flash flooding resulted two to three feet of water in some city streets. Motorists reported high water up the hoods of cars. No reports of disabled vehicles were receive, and there were no injuries.
Upton County North Portion	25	0915CST 1130CST			0	0	0	0	Flash Flood
									Heavy rainfall resulted in flash flooding of several highways across the northern parts of Upton County. Highway 329 was closed due to high water nineteen miles northwest of Rankin. High water in Nine Mile Draw flooded Highway 349 nine miles north of Rankin. Flash flooding was also reported in the city streets of Midkiff at 09:55 CST.
Reagan County 36 NW Big Lake	25	1007CST 1200CST			0	0	0	0	Flash Flood
									Flash flooding resulted in high water flowing over Farm to Market Road 2401.
Howard County Big Spring	25	1130CST 1330CST			0	0	50K	0	Flash Flood
									Flash flooding in the city streets of Big Spring resulted in a dangerous situation for motorists. Local authorities reported "numerous" vehicles stalled in up to three feet of flowing water in city streets. Rescue workers removed several people from vehicles which were submerged up to the windshields in the flood waters. No injuries were reported.
Mitchell County Colorado City to 1 W Colorado City	25	1250CST 1255CST	1	30	0	0	250K	0	Tornado (F1)

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TEXAS West

A tornado developed along Farm to Market Road 1983 just west of Colorado City, approximately one half mile south of Interstate Business 20. The tornado initially moved northwest, and produced light damage to two mobile homes along 1983. An eyewitness who observed the tornado during its early stages described the tornado as a tall and narrow vortex which lofted debris approximately 200 feet into the air.

The tornado began moving west along Interstate Business 20. Part of the roof was blown off of the KVCM-KAUM Radio station. The tornado then strengthened as it moved through a rural residential neighborhood immediately south of Business 20. A house west of the radio station lost part of its roof, a car port, and a storage barn. Two campers were destroyed at this residence, with one being deposited southeast (upwind) of its original location. Utility poles and trees were also damaged.

F1 damage was sustained to the next house along the path to the west. Tornadoic winds damaged the garage door of this well built home on the northeast corner of the structure. After the garage door was compromised, high speed winds (estimated between 90 and 100 MPH) entered the remainder of the structure, and the roof blew off. Large pieces of roof debris knocked down utility poles, damaged large trees, and moved vehicles located downwind of the house. The adjacent house to the west was also sustained damage from flying debris.

A home owner two houses further west observed the the tornado, and fled in his vehicle on Business 20. He observed the dissipation of the debris-filled tornado, and watched as large pieces of roof were deposited on his property causing additional minor damage.

Mitchell County
Colorado City

25	1256CST 1400CST				0	0	0	0	Flash Flood
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Local law enforcement officials reported high water flowing in many city streets as a result of flash flooding.

Very moist atmospheric conditions, a cold front, and sufficient upper level dynamics resulted in a broad band of moderate to occasionally heavy rainfall which developed over the Trans Pecos region of West Texas during the morning hours, and moved from southwest to northeast across the Permian Basin throughout the day. Strong convection embedded within the large precipitation shield resulted in flash flooding.

A weak, but damaging, tornado struck near Colorado City during the early afternoon. The tornado developed as a narrow line of non-supercellular thunderstorms formed within the rain shield near the surface cold front.